

HANFORD SITE

Environmental Restoration Contract *Monthly Performance Report*

November 2003

Accelerating Cleanup ...



Department of Energy
Richland Operations Office



Bechtel Hanford, Inc.
Environmental Restoration Contractor

ENVIRONMENTAL RESTORATION EXECUTIVE SUMMARY

November 2003 Monthly Report

SAFETY:

During the period October 1, 2003 through November 30, 2003, the ERC experienced 4 first aid incidents and 1 lost away injury, which equates to having **93% of our workdays injury free**. Selected members of the ERC Team performed and documented the annual Voluntary Protection Program (VPP) self-assessment, involving 13 interviewers and 84 individuals who volunteered to be interviewed. This self-assessment information will be compared with a similar self-assessment performed one year ago. A summary of this information will be added to the ERC VPP Application for Star Status to be submitted to DOE by mid-December 2003.

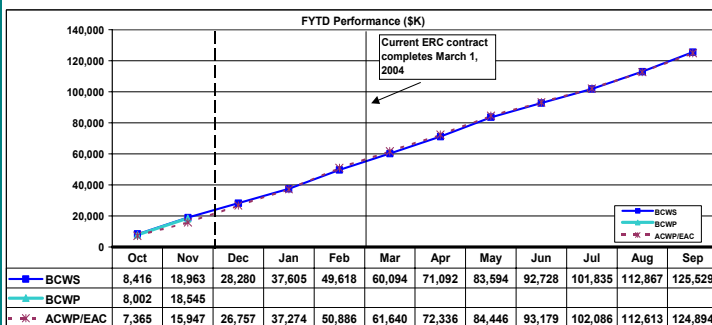
HIGHLIGHTS:

- Completed H Reactor hot spot removal in west transfer pit (no additional spent fuel elements found).
- Completed D Reactor SSE design.
- Completed 1304-N Dump Tank mobilization and demolition preparation activities.
- Completed 100 B/C pipeline plume excavation on November 5 meeting TPA Milestone M-16-26E nearly 11 months ahead of schedule.
- Initiated backfill of 100 B/C pipelines; completion is scheduled for March 2004
- Initiated remediation of four accelerated 100 B/C Area Burial Ground sites.
- Initiated 300-FF-1 and 618-5 Burial Ground regrade project.
- Excavated 569,736 bank cubic yards (BCY) (40.4% complete) since ERDF Cells 5/6 expansion project began on October 7.
- Submitted Baseline Risk Assessment Scoping document to RL for approval.

UPCOMING KEY ACTIVITIES:

- Issue F Reactor S&M Plan; close out ISS subcontract - 12/03.
- Complete H Reactor FSB excavation - 2/04.
- Commence/complete remediation of five small K Area sites and 116-KE-1/116-KW-1 Condensate Crib.
- Distribute *Conceptual Site Model for 100 B/C Pilot Project Ecological Risk Assessment* for external review - 12/03.

PERFORMANCE:



GREEN TEXT = AHEAD OF SCHEDULE
RED TEXT = BEHIND SCHEDULE

- SV:** (\$418K); (2.2%). Start of 1304-N Dump Tank removal impacted by weather (wind/radon) and issues involving contamination control/equipment (lift) problems; delay in 105-F decon pad excavation/sampling due to resources working higher priorities; delay in starting 100 Area asbestos abatement due to PFWR; and deferral of B Reactor dynamic assessment.
- CV:** \$2,598K; 14.0%. ERDF Expansion payment record not processed; ERDF Disposal accrual understated; reduced miscellaneous support, equipment, material at H Reactor ISS due to discovering fewer fuel elements than anticipated; and less engineering support for D Reactor. *After record and accrual adjustment, actual variance is \$1.5M (+8.1%).*

EAC TRENDS:

FYTD: (\$636K)

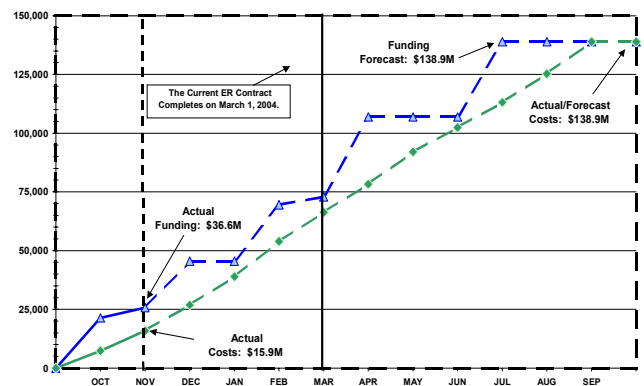
Current Month: (\$998K)

- B Reactor dynamic assessment to be deferred to FY05.
- ERDF transportation labor underruns.
- Staffing reductions in Program Management and Support.
- Unplanned costs for material, equipment, subcontract, engineering support for Risk Assessment project.

TPA MILESTONES:

- Three TPA milestones are scheduled for completion during FY04:
- M-16-03H, Complete 300 Area regrade (due 6/30/04); *forecast 3/1/04.*
- M-16-26E, Complete 100 B/C pipeline excavation (due 9/30/04); *completed 11/5/03.*
- M-93-11, Complete F Reactor ISS (due 9/30/04); *forecast 12/31/03.*

FUNDING:



PERFORMANCE INCENTIVES:

No approved PI's at this time.

ISSUES:

- Mud dauber contamination legacy (H Reactor).
- Airborne radiation control concern at 1304-N (fixative issues).
- Non-ERC Hanford waste to ERDF.



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ENVIRONMENTAL RESTORATION FACILITIES DECOMMISSIONING PROJECT

November 2003 Monthly Report

SAFETY:

No first aid, recordable, lost workday cases, or skin contaminations experienced FYTD.

HIGHLIGHTS:

H Reactor:

- Completed transfer bay slab demolition.
- Completed hot spot removal in west transfer pit (no additional spent fuel elements found).
- Completed core sample removal and analysis from the gas wing in preparation for explosive demolition.

D Reactor:

- Completed SSE design.

1304-N Dump Tank:

- Completed mobilization and demolition preparation activities.
- Completed fogging of the tank interior.

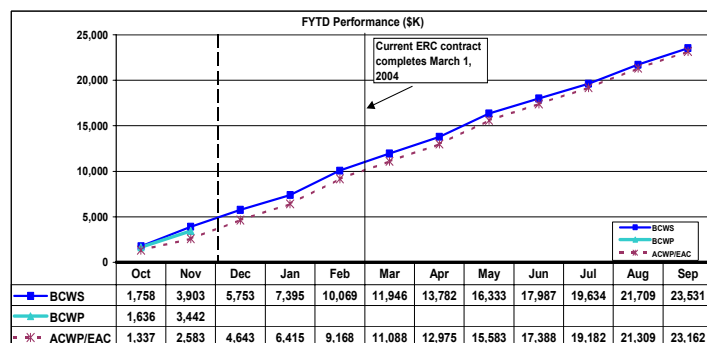
S&M:

- Performed site and facility S&M activities.

UPCOMING KEY ACTIVITIES:

- Issue F Reactor S&M Plan; close out ISS subcontract - 12/03.
- Ship fuel pieces from H Reactor to K Basin - 1/04.
- Complete H Reactor FSB excavation - 2/04.
- Complete 1304-N Emergency Dump Tank removal - 3/04.

PERFORMANCE:



- SV:** (\$461K); (11.8%). Start of 1304-N Dump Tank removal impacted by weather (wind/radon) and issues involving contamination control/equipment (lift) problems; delay in 105-F decon pad excavation/sampling due to resources working higher priorities; delay in starting 100 Area asbestos abatement due to PFWR; and deferral of B Reactor dynamic assessment.
- CV:** \$859K; 25%. Reduced miscellaneous support, equipment, material at H Reactor ISS due to discovering fewer fuel elements than anticipated; less engineering support for D Reactor.

EAC TRENDS:

FYTD: (\$369K)

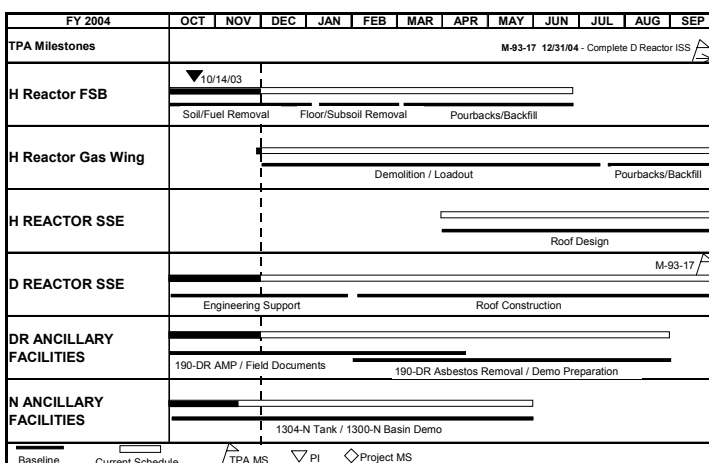
Current Month: (\$277K)

- B Reactor dynamic assessment to be deferred to FY05.
- 300 Area S&M and 190-DR demolition preparation less than anticipated.

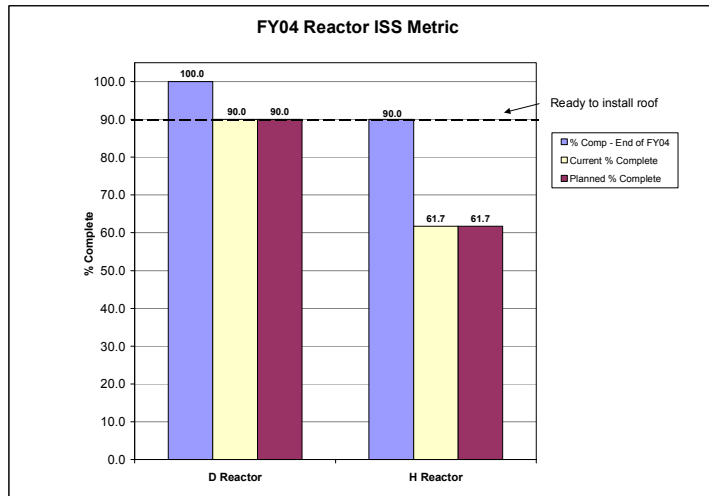
TPA MILESTONES:

- M-93-11, Complete F Reactor ISS (Due 9/30/04); *forecast 12/31/03*. (Physical ISS work completed in August; awaiting regulator approval of S&M Plan.)
- M-93-17, Complete D Reactor ISS (due 12/31/04); *forecast 9/30/04*.

SUMMARY SCHEDULE:



ISS METRIC:



PERFORMANCE INCENTIVES:

No approved PI's at this time.

ISSUES:

- Mud dauber contamination legacy (H Reactor).* Surveying/ downposting areas within site perimeter fence ongoing; 80-90% of areas previously posted have been recovered to original postings. Areas within reactor building and SSE are in process of being surveyed.
- Concern about airborne radiation control at 1304-N (fixative issues).*

ENVIRONMENTAL RESTORATION REMEDIAL ACTION PROJECT

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SAFETY:

FYTD: 3 first aids; 0 recordable; 0 lost workday cases
Current Month: 3 first aids (2 strains, 1 contusion)

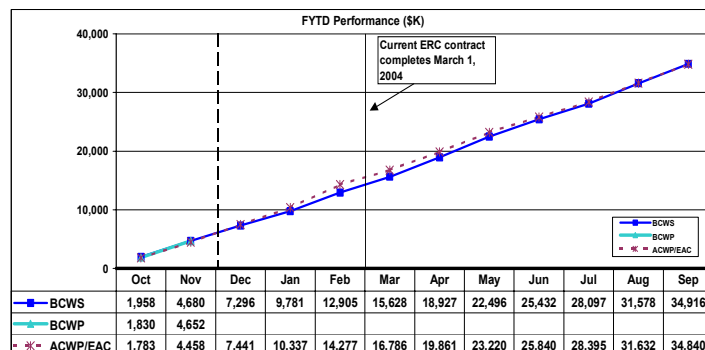
HIGHLIGHTS:

- Completed 100 B/C pipeline plume excavation on November 5 meeting TPA Milestone M-16-26E nearly 11 months ahead of schedule.
- Initiated backfill of 100 B/C pipelines; completion is scheduled for March 2004.
- Initiated remediation of four accelerated 100 B/C Area Burial Ground Sites.
- Submitted recommendation for remediation award of 100 B/C Burial Grounds and Remaining Sites to RL for approval. Award is planned for early December; work will begin January 2004.
- Continued 100 K Area excavation at 116-KE-4 Retention Basin, 116-K-1 Crib (plumes), and 100-KR pipelines.
- Completed 116-KW-3 Retention Basin confirmation sampling and analysis. CVP is 40% complete.
- Held 116-N-1 Crib pre-bid meeting on November 4.
- Initiated 300-FF-1 and 618-5 Burial Ground regrade project.
- Preparing an ESD changing the 300-FF-2 cleanup levels for select outside-the-fence waste sites from industrial to unrestricted.
- Completed historical and current industry practices research for handling/treating zircalloy shavings/chips in the 618-7 Burial Ground.

UPCOMING KEY ACTIVITIES:

- Commence/complete remediation of five small K Area sites and 116-KE-1/116-KW-1 Condensate Crib.
- Submit BCPs for 100 F Area remaining sites accelerated design and RFP, for accelerated scope at the 100 B/C miscellaneous remaining sites, and for the 118-K-1 Burial Ground.
- Begin 618-7 Burial Ground field activities in March 2004.

PERFORMANCE:



- SV:** (\$28K); (0.6%). Plumes at 116-K-1 and wind days. Variance partially offset by accelerated efforts on 300 Area regrading.
- CV:** \$194K; 4.2%. Credit received for return of excess 300-FF-1 soil bags; labor underruns at 100-NR-1.

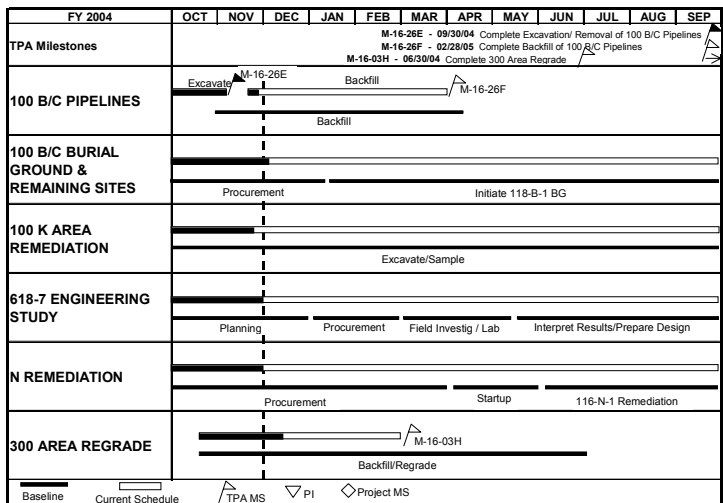
EAC TRENDS:

FYTD: (\$76K)
Current Month: (\$90K)
• Efficiencies on 618-7 research task.

TPA MILESTONES:

- M-16-03H, Complete 300-FF-1 and 618-5 Burial Ground regrade (due 6/30/04); *forecast 3/1/04.*
- M-16-26E, Complete excavation/removal of 100 B/C pipelines (due 9/30/04); *complete 11/5/03, nearly 11 months ahead of schedule.*
- M-16-26F, complete backfill of 100 B/C pipelines (due 2/28/05); *forecast 3/30/04.*

SUMMARY SCHEDULE:



PERFORMANCE INCENTIVES:

No approved PI's at this time.

ISSUES:

None at this time.

ENVIRONMENTAL RESTORATION WASTE OPERATIONS PROJECT

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SAFETY:

FYTD: 1 first aid; 0 recordable; 0 lost workday cases
Current Month: 1 first aid (foreign body-sliver)

Occurrence: Articulated dump truck mechanical failure (RL-BHI-ERDF-2003-0006).

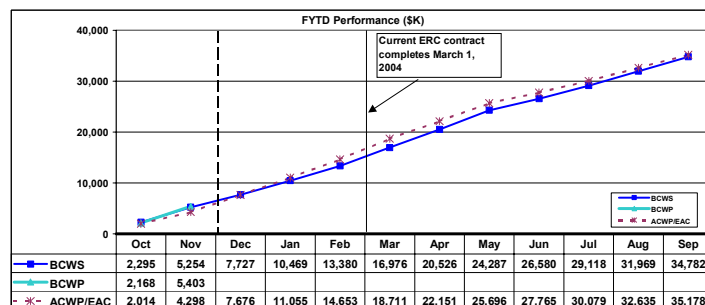
HIGHLIGHTS:

- Disposed 28,504 tons of waste in ERDF in November; 70,736 tons during FY04; 4,588,501 tons of contaminated material have been disposed in ERDF since operations began in July 1996.
- Suspended ERDF Disposal operations 6 days (out of 18 scheduled workdays) due to high winds.
- Excavated 331,072 bank cubic yards (BCY) at ERDF expansion Cells 5/6 project in November; excavated 569,736 BCY (40.4% complete) since project began on October 7.
- Completed pug mill mobilization.
- Completed 90-day test pad construction; installed Sealed Double Ringed Infiltrimeter (SDRI) on November 25.
- Initiated preparation of excavation permits for alternate gravel pits.

UPCOMING KEY ACTIVITIES:

- Complete treatment of depleted uranium chips-in-oil drummed waste (from 618-4 Burial Ground) that was sent to Oak Ridge in September. All treatment is expected to be complete by April 2004. Treated waste will be returned to ERDF for disposal. (M-16-03I).
- Begin receiving 183-H Solar Basin drummed waste requiring treatment at ERDF in December. Full-scale treatment will continue for several months.
- Begin receiving waste from 116-KW-1 and 116-KW-2 (K Area accelerated scope) that is expected to contain elevated levels of carbon-14. Waste will be treated at ERDF to immobilize carbon-14 prior to disposal.
- Due to adding second shift, anticipate ERDF Cells 5/6 excavation to complete approximately three weeks ahead of schedule (early February 2004).
- Receive 90-day test pad results late February 2004.
- Initiate Admix production in February 2004.

PERFORMANCE:



- SV:** \$149K; 2.8%. Treatment of uranium chips-in-oil drums ahead of schedule; offset by excavation delay of ERDF expansion due to several days of inclement weather.
- CV:** \$1,105K; 20.5%. ERDF Expansion payment record not processed in November; ERDF Disposal accrual understated. Both will be corrected in December.

EAC TRENDS:

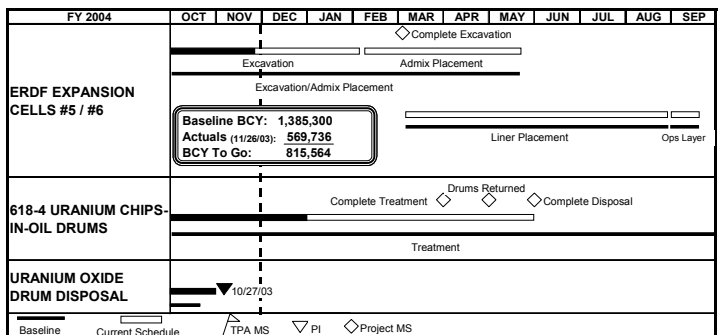
FYTD: \$395K
Current Month: (\$112K)

- Transportation labor underruns.

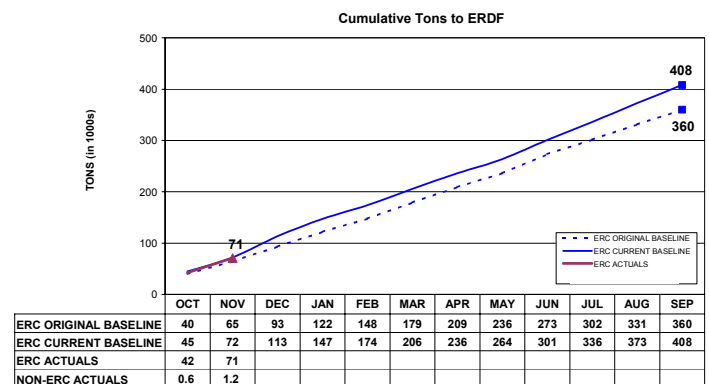
TPA MILESTONES:

- M-16-03I, Complete treatment of drummed waste from 618-4 Burial Ground (due TBD).

SUMMARY SCHEDULE:



ERDF TONNAGE:



PERFORMANCE INCENTIVES:

No approved PI's at this time.

ISSUES:

- Non-ERC Hanford Waste to ERDF.* Evaluate the acceptance of Hanford Site waste disposal.

ENVIRONMENTAL RESTORATION RISK ASSESSMENT AND SITE CLOSURE PROJECT

November 2003 Monthly Report

SAFETY:

No first aid, recordable, or lost workday cases experienced FYTD.

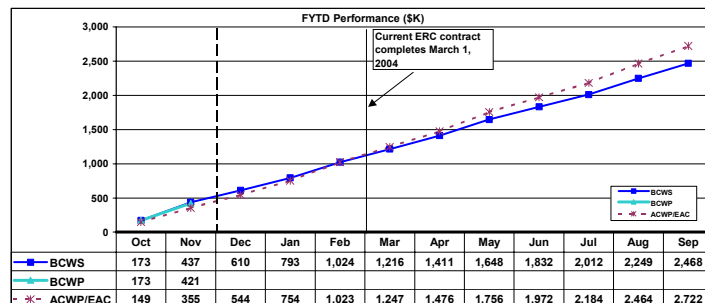
HIGHLIGHTS:

- Provided draft *100 Area and 300 Area River Corridor Baseline Risk Assessment: Basis and Assumptions on Project Scope* to RL, EPA, Ecology, Tribes, Trustees, and HAB for review.
- Provided draft Tribal Communication/Consultation Plan and Public Involvement Plan to RL in support of River Corridor Baseline Risk Assessment (RCBRA) Project.
- Resolved stop work order due to unidentified pipeline at Pit 30. Acquired drawing, added data to database, mapped data with existing data, and collected a GPS verification point in support of future risk assessment site closure activities. Confirmed pipeline was a 12-inch abandoned (unused) waste water pipeline belonging to old 200 Area Batch Plant.

UPCOMING KEY ACTIVITIES:

- Approval of *100/300 Area River Corridor Baseline Risk Assessment: Basis and Assumptions on Project Scope*.
- Approval of BCP for Risk Assessment and Site Closure Project accelerated workscope on December 18.
- Meet with Tribes to finalize RCBRA Project Tribal Communication/Consultation Plan in January.
- Provide draft annotated outline for 100/300 Area River Corridor Baseline Risk Assessment Work Plan in December.
- Initiate compilation of existing ecological data for 100/300 Area risk assessment in December.
- Initiate shoreline radiation surveys for 100/300 Area risk assessment in December.
- Distribute *Conceptual Site Model for 100 B/C Pilot Project Ecological Risk Assessment* for external review in December.
- Update 100 D/DR Area maps to assist in identifying potential sources for an increase in hexavalent chromium in groundwater wells.

PERFORMANCE:



- **SV:** (\$16K); (3.7%). Subcontract support experienced slight delay; no impact.
- **CV:** \$66K; 15.7%. Equipment received, but not yet billed.

EAC TRENDS:

FYTD: \$254K

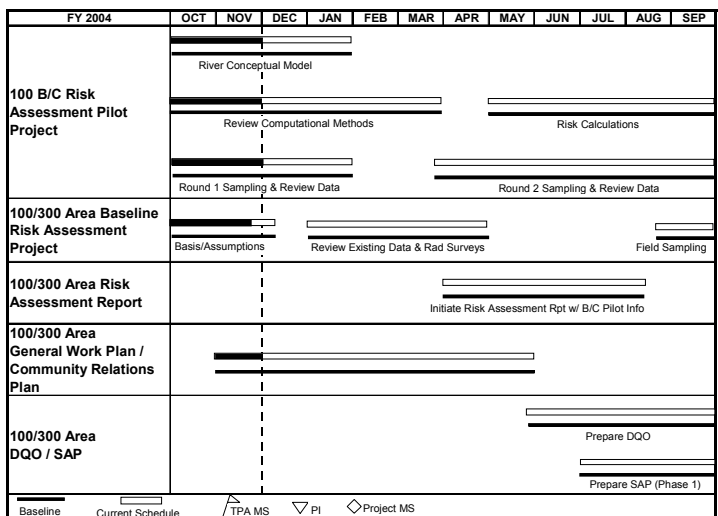
Current Month: \$254K

- Unplanned costs for material, equipment, subcontract, engineering support.

TPA MILESTONES:

No FY04 milestones.

SUMMARY SCHEDULE:



PERFORMANCE INCENTIVES:

No approved PI's at this time.

ISSUES:

None at this time.

ENVIRONMENTAL RESTORATION PROGRAM MANAGEMENT AND SUPPORT PROJECT

November 2003 Monthly Report

SAFETY:

No first aid, recordable, or lost workday cases experienced FYTD.

HIGHLIGHTS:

Safety and Health:

- Performed and documented the annual VPP self-assessment. This assessment involved 13 interviewers and 84 volunteer interviewees at multiple projects.
- Working with 618-7 Burial Ground project to establish appropriate controls to prevent spread of contamination and ignition of metal shavings from recently excavated drums. These drums contain 5% (or greater) beryllium in zircalloy metal shavings and will require new controls.

Technical Services:

- Completed ERC training to the new model code requirements that were incorporated into General Design Criteria, BHI-00747.
- Submitted ERC planned asbestos removal actions for inclusion in a site-wide submittal to Benton County Air Authority.
- Completed corrective actions through the upgrade of procedures and work processes for biological vector hazards based on contamination spread by mud daubers at H Reactor.
- Completed final report on technology options for excavating, stabilizing, and disposing of drums of pyrophoric zircalloy that are present in the 618-7 Burial Ground.

UPCOMING KEY ACTIVITIES:

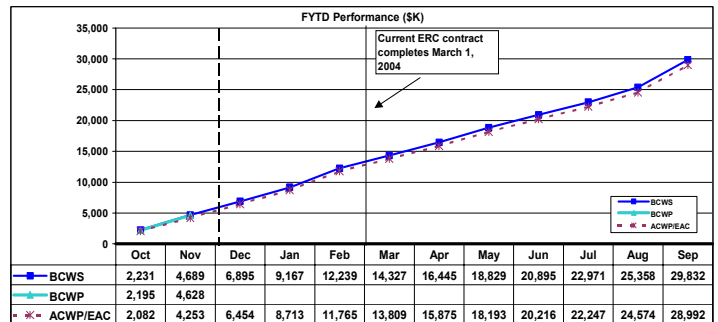
Safety and Health:

- Submit updated VPP application to RL by mid-December.

Technical Services:

- Complete the 2003 Hanford Site Tier Two Emergency and Hazardous Chemical Inventory Report due to Fluor Hanford on December 18.
- Development of site-wide Memorandum of Understanding for groundwater management in December.
- Submittal of Hanford RCRA Permit Renewal Application due to Ecology in March 2004.

PERFORMANCE:



- **SV:** (\$61K); (1.3%). N/A
- **CV:** \$375K; 8.1%.
- **Safety and Health:**
 - Rad Con scope continuing at minimum compliance level supported by existing resources.
- **Technical Services:**
 - Underruns in field sampling and analysis due to more direct project support being provided.
- **ARQP:**
 - Lost full-time manager and 3 staff. CATS support is continuing at minimum levels, 5 ISMS metrics and quarterly trend activities not being updated and reported. Recovery plan is being implemented.

EAC TRENDS:

FYTD: (\$840K)

Current Month: (\$773K)

- Staffing reductions in Rad Con, Baseline Management, and ARQP.

PERFORMANCE INCENTIVES:

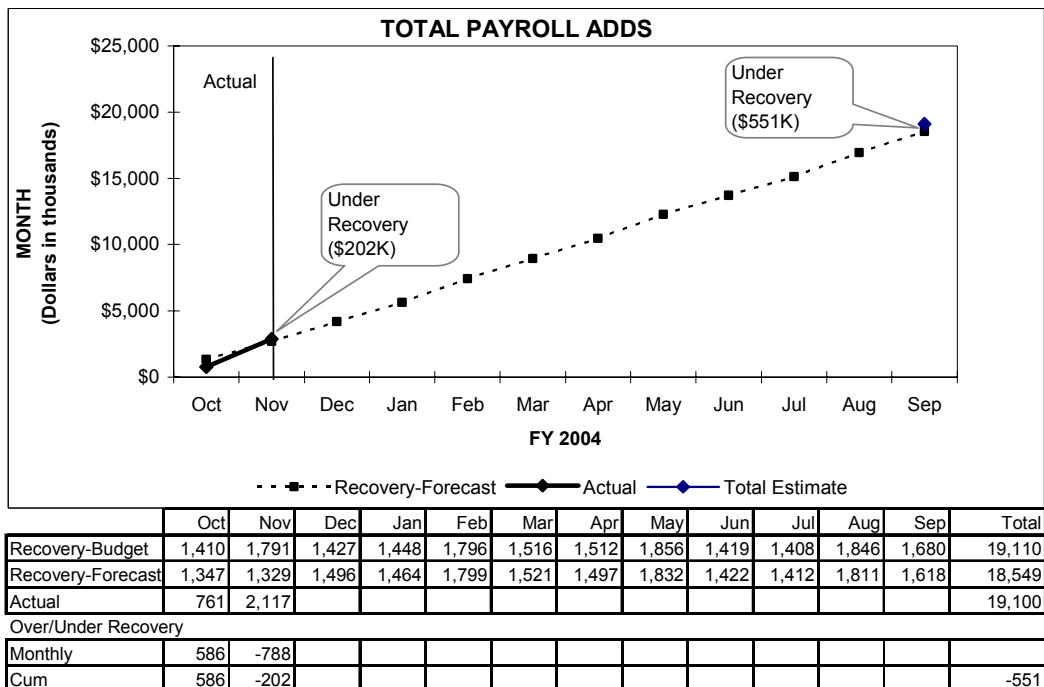
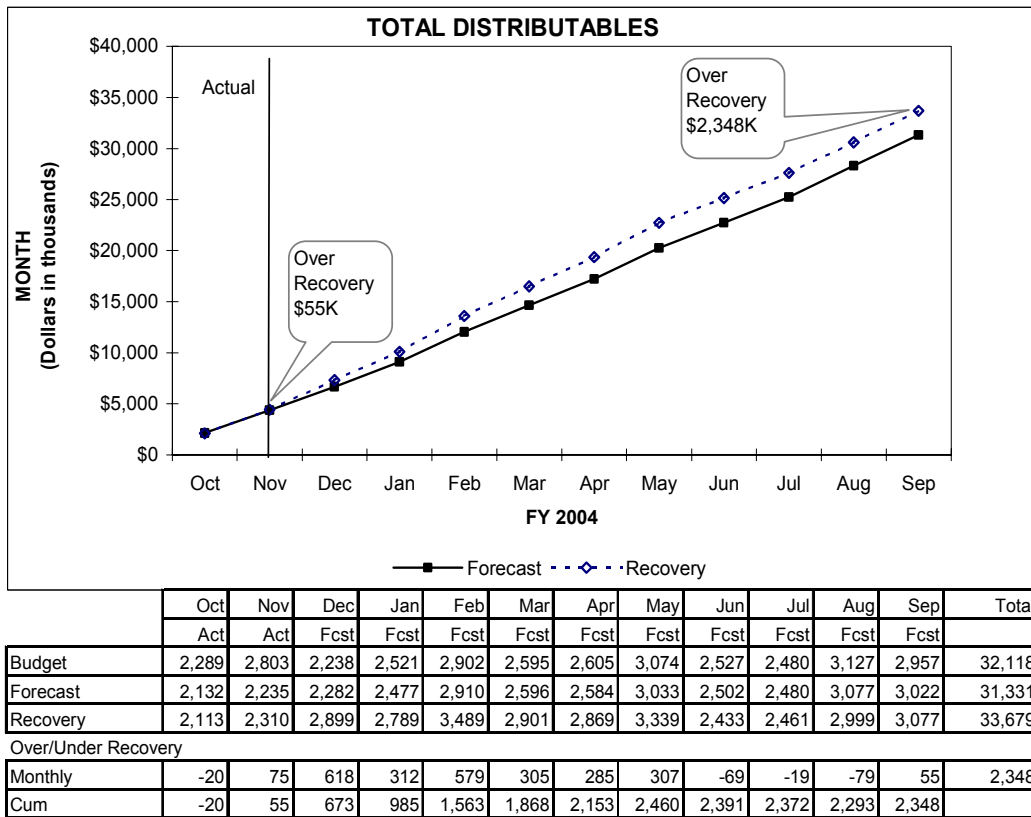
No approved PI's at this time.

ISSUES:

None at this time.

ENVIRONMENTAL RESTORATION RECOVERY

November 2003 Monthly Report



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